

School Height and Weight Report

For South Dakota Students
2004-2005 School Year



For the full report, see www.state.sd.us/doh/SchoolWeight.

For additional information, see www.healthysd.gov.

South Dakota Department of Health
March 2006

The South Dakota Department of Health, in cooperation with the South Dakota Department of Education has collected height and weight data on students since the 1998-1999 school year. This pamphlet summarizes the report of the data collected during the 2004-2005 school year.

Schools voluntarily submit height and weight data. Data for the 2004-2005 year was collected for 26.8 percent of the state's students from 229 schools, which is 26.3 percent of the state's attendance centers. While American Indian students comprise 15.6 percent of the South Dakota enrollment population, they represent 13.4 percent of the respondents. Schools and/or school districts who submitted measurements from 100 or more students are receiving school specific and/or district specific data along with the aggregate data in the full report.



At Risk For Overweight And Overweight

Data is analyzed for short stature, underweight, overweight and at risk of overweight using the current national standards. This pamphlet focuses on excess weight as South Dakota students as a whole are not short nor underweight.

Definitions:

Overweight: At or above the 95th percentile BMI-for-age when compared to children of the same age and gender.

At risk of overweight: 85th to 94th percentile BMI-for-age when compared to children of the same age and gender

The national Healthy People 2010 objectives list to “reduce the proportion of children and adolescents who are overweight or obese.” The national Healthy People 2010 target in each of four age groups is five percent. The South Dakota

Department of Health 2010 Initiative performance indicator is to “reverse the trend and reduce the percent of school-age children and adolescents who are overweight or obese from 17% in 2003 to 15% by 2010.”

Obesity Risk Factors

Obesity is a risk factor for the following conditions: cardiovascular disease, hypertension, diabetes, degenerative joint disease, and psychological problems. Although commonly thought of as an adult disease, obesity is a growing problem in children and adolescents and its consequences are increasingly being seen. Overweight children and adolescents have increased blood lipids and other cardiovascular risk factors. Research shows that 60.0 percent of overweight 5- to 10-year-old children already have at least one risk factor for heart disease, including hyperlipidemia and elevated blood pressure or insulin levels. Type 2 Diabetes



in children, a disease that typically appears in adults, is increasing at alarming rates among children and adolescents. Liver disorders are more frequently found in overweight children and overweight children also have more hypertension, sleep apnea, and orthopedic complications. Overweight children are taller and mature earlier than non-overweight children. (Dietz, *Pediatrics* 101 Suppl, March 1998).

However, the most widespread consequences of obesity in children are psychological. With a culture that generally prefers thinness, overweight children are targets of early and systematic discrimination. They have fewer friends and are regarded as lazy or sloppy. Obese adolescents develop a negative self-image. Children who mature early tend to have lower self-esteem. (Dietz, *Pediatrics* 101 Suppl, March 1998).

The tables below provide the BMI-for-age statistics for South Dakota students. These data show that for all of the age groups and racial groups, South Dakota will need to substantially reduce the number of overweight children and adolescents in order to meet the Healthy People 2010 objective of five percent. All age groups except 5-8 year olds and all racial groups except white are above the South Dakota 2010 Initiative goal of 15%.

School Year 2004-2005 At Risk For Overweight And Overweight Body Mass Index For Age				
Age	Number Of Students	At Risk For Overweight	Overweight	At Risk For Overweight And Overweight Combined
5-8 years	11,686	16.1%	14.3%	30.4%
9-11 years	11,394	17.1%	18.4%	35.5%
12-14 years	9,292	16.8%	16.5%	33.3%
15-19 years	3,117	16.4%	16.0%	32.4%
Total	35,489	16.6%	16.4%	33.0%

Source: South Dakota Department of Health



School Year 2004-2005 At Risk For Overweight And Overweight Body Mass Index For Age, By Race				
Race	Number of Students	At Risk For Overweight	Overweight	At Risk For Overweight And Overweight Combined
White	27,345	16.2%	14.8%	31.0%
American Indian	4,317	18.7%	26.1%	44.8%
Other Races	1063	17.0%	18.5%	35.5%
Race Unknown	2,765	17.1%	15.3%	32.4%
Total	35,489	16.6%	16.4%	33.0%

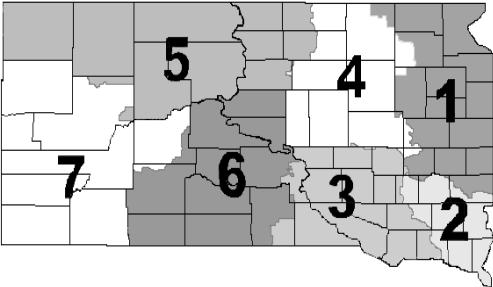
Source: South Dakota Department of Health



Regional Data

This report provides regional data. The composition of the regions varies in racial and age distribution. See the full report for additional information.

S.D. Education Service Agencies Region Map



Source:
South Dakota Department of Education

School Year 2004-2005 At Risk For Overweight And Overweight Body Mass Index For Age, By Educational Region				
Region	Number of Students	At Risk For Overweight	Overweight	At Risk For Overweight And Overweight Combined
Region 1	7,785	17.2%	15.5%	32.7%
Region 2	5,557	15.7%	13.4%	29.1%
Region 3	3,371	17.1%	16.3%	33.4%
Region 4	5,719	16.9%	17.8%	34.7%
Region 5	1,901	17.5%	23.7%	41.2%
Region 6	3,131	17.5%	18.2%	35.7%
Region 7	7,920	15.7%	15.7%	31.4%
Total	35,489	16.6%	16.4%	33.0%

Prevention Of Child Overweight And Child Obesity

Child overweight and child obesity is a multi-faceted problem that should be addressed by promoting healthy eating and increasing physical activity and decreasing inactivity. While needing to prevent overweight and obesity in children, care must be taken not to encourage weight preoccupation, inappropriate eating habits, and extreme amounts of exercise associated with eating disorders in youth. Schools can develop wellness policies that follow the South Dakota Model School Wellness Policies (http://doe.sd.gov/oess/cans/docs/Wellness_Policy.pdf).

The following guidelines are steps for everyone to take to prevent child overweight and obesity.

What Everyone Can Do

- Set a good example by being physically active and eating a healthy, balanced intake high in fruits, vegetables, and whole grains.
- Advocate for convenient, safe, and adequate places for young people to play and take part in physical activity programs.
- Support daily physical education and other school programs that promote lifelong healthy eating and physical activity, not just competitive sports.
- Urge parent associations and school clubs to sell healthy foods or nonfood items for fund-raising activities.
- Join a school health or nutrition advisory council, such as Team Nutrition, to help guide nutrition policy and educational programs.
- Access walking and bicycling trails in your community and area parks.



- Participate in the Fantastic Fourth Grade “Scientific Expedition” Field Trip sponsored by SD Division of Parks and Recreation, (605) 773-3391.
- Promote walking at your school and participate in “SD Schools Walk”
<http://doe.sd.gov/oess/schoolhealth/sdwalks/>.
- Refrain from using food to discipline or reward students.
- Request healthy snacks for class parties.

What School Nutrition Staff Can Do

- Provide meals that are tasty and appealing to students and that meet USDA nutrition standards and the Dietary Guidelines for Americans.
- Support classroom lessons by offering foods to illustrate key messages, decorating the cafeteria with educational posters, and posting the nutritional content of foods served.
- Coordinate activities with classroom and physical education teachers and other staff.

What School Administrators And Board Members Can Do

- Organize a school health or nutrition advisory committee that includes all key groups.
- Allocate adequate time for nutrition education as part of a sequential, comprehensive health education program.
- Make schools available for the public to use during the winter months for walking.
- Require health education and daily physical education for students in grades K-12.
- Become a *Team Nutrition* school and implement the program.
- Provide adequate time and space for students to eat meals in a pleasant, safe environment.
- Provide time during the day, such as recess, for unstructured physical activity, such as walking or jumping rope.
- Stock vending machines with 100 percent fruit juice and other healthy snacks; make sure that healthy foods are served at school meetings and events.
- Limit the sale of high-fat, high-sugar snacks during mealtimes and as fund-raisers.



What Students Can Do

- Make healthy choices in the school cafeteria or when packing lunch.
- Walk to school where possible.
- Ask for healthy snacks.
- Encourage the student council to advocate for physical education classes and after-school programs that are attractive to all students and to request healthy food choices in school and at school events.
- Limit television watching or computer games to no more than two hours per day.

What Teachers And Coaches Can Do

- Use curricula that follow CDC's guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People.
- Use curricula that follow CDC's *Guidelines for School Health Programs to Promote Lifelong Healthy Eating*.
- Use the South Dakota Health Education Content Standards and the South Dakota Physical Education Content Standards as guides for curriculum planning.
<http://www.state.sd.us/DOE/>
- Contact Coordinated School Health in the Departments of Education and Health for technical assistance in selecting quality curriculum and increasing physical activity.
<http://www.state.sd.us/doe/cscf/schoolhealth>



What School Nurses And Health Professionals Can Do

- Measure height and weight accurately and use the CDC growth charts to screen children and adolescents.
- Provide anticipatory guidance to parents and children regarding healthy eating and physical activity habits.
- Evaluate children and adolescents with positive screens and refer as appropriate for intervention.